

## Supplementary Tables

Table S2(a)

Correlation coefficients among fodder quality and agronomic traits of breeding lines (n= 50; Lower diagonal) and landraces (n= 264; upper diagonal) of finger millet germplasm

Trait <sup>#</sup>	DF	DM	GY	SY	HI	BTN	PH	Dm	Ash	CP	NDF	ADF	ADL	ME	IVOMD
DF	1	0.995**	0.031	0.628**	-0.577**	-0.369**	0.309**	-0.422**	-0.438**	-0.331**	0.041	-0.192**	-0.249**	0.411**	0.363**
DM	0.998**	1	0.028	0.624**	-0.572**	-0.371**	0.296**	-0.424**	-0.441**	-0.324**	0.043	-0.189**	-0.244**	0.408**	0.360**
GY	0.467**	0.462**	1	0.459**	0.583**	0.144*	0.022	-0.118	-0.114	-0.304**	-0.007	-0.095	-0.014	0.113	0.050
SY	0.859**	0.861**	0.522**	1	-0.407**	-0.187**	0.491**	-0.217**	-0.483**	-0.573**	-0.134*	-0.393**	-0.335**	0.512**	0.404**
HI	-0.708**	-0.710**	-0.024	-0.836**	1	0.365**	-0.445**	0.103	0.347**	0.192**	0.080	0.235**	0.292**	-0.343**	-0.313**
BTN	-0.493**	-0.498**	-0.193	-0.475**	0.439**	1	-0.263**	0.057	0.148*	0.082	0.153*	0.286**	0.257**	-0.349**	-0.353**
PH	0.753**	0.747**	0.353*	0.798**	-0.752**	-0.319*	1	0.048	-0.451**	-0.542**	0.201**	0.034	0.049	0.269**	0.162**
Dm	-0.145	-0.151	0.154	-0.232	0.344*	-0.117	-0.231	1	0.188**	0.061	-0.097	0.078	0.111	-0.116	-0.124*
Ash	-0.032	-0.028	0.116	-0.081	0.188	-0.184	-0.179	0.220	1	0.661**	-0.383**	-0.028	-0.081	-0.486**	-0.341**
CP	-0.163	-0.156	-0.073	-0.242	0.282*	-0.179	-0.328*	0.224	0.591**	1	-0.301**	-0.091	-0.112	-0.499**	-0.332**
NDF	-0.173	-0.183	-0.009	-0.379**	0.436**	0.463**	-0.134	0.302*	-0.249	-0.109	1	0.775**	0.838**	-0.383**	-0.487**
ADF	-0.504**	-0.513**	-0.172	-0.616**	0.559**	0.547**	-0.268	0.330*	-0.084	-0.122	0.770**	1	0.834**	-0.551**	-0.581**
ADL	-0.380**	-0.385**	-0.122	-0.533**	0.537**	0.502**	-0.221	0.305*	-0.124	-0.126	0.876**	0.894**	1	-0.647**	-0.736**
ME	0.280*	0.282*	-0.043	0.411**	-0.491**	-0.324*	0.275	-0.362**	-0.390**	-0.257	-0.627**	-0.642**	-0.743**	1	0.976**
IVOMD	0.239	0.241	-0.049	0.351*	-0.425**	-0.359**	0.210	-0.308*	-0.246	-0.092	-0.673**	-0.637**	-0.786**	0.977**	1

<sup>#</sup>DF= Days to 50% flowering, DM= Days to maturity, GY=Grain yield (kg ha<sup>-1</sup>), SY=Stover yield (kg ha<sup>-1</sup>), HI=Harvest index, BTN=Basal tillers number, PH=Plant height (cm), Dm= Dry matter (%), Ash content (%), CP=Crude protein (%), NDF=Neutral detergent fiber (%), ADF=Acid detergent fiber (%), ADL=Acid detergent lignin (%), ME=Metabolizable energy (MJ/kg Dm), IVOMD=*in vitro* organic matter digestibility (%).

\*, \*\* Significant at P≤0.05, 0.01 probability levels, respectively.

Table S2(b)

Correlation coefficients among fodder quality and agronomic traits of finger millet accessions from Africa (n= 160; lower diagonal) and Asia (n= 136; upper diagonal)

Trait <sup>#</sup>	DF	DM	GY	SY	HI	BTN	PH	Dm	Ash	CP	NDF	ADF	ADL	ME	IVOMD
DF	1	0.997**	0.128	0.707**	-0.667**	-0.408**	0.526**	-0.449**	-0.289**	-0.297**	-0.097	-0.362**	-0.433**	0.458**	0.424**
DM	0.992**	1	0.121	0.709**	-0.673**	-0.412**	0.521**	-0.439**	-0.286**	-0.288**	-0.106	-0.366**	-0.436**	0.454**	0.420**
GY	-0.069	-0.060	1	0.549**	0.439**	0.053	0.227**	0.008	-0.012	-0.267**	-0.151	-0.299**	-0.174*	0.109	0.054
SY	0.394**	0.392**	0.412**	1	-0.463**	-0.217*	0.664**	-0.344**	-0.335**	-0.488**	-0.264*	-0.544**	-0.478**	0.476**	0.381**
HI	-0.381**	-0.372**	0.736**	-0.273**	1	0.365**	-0.489**	0.363**	0.365**	0.214*	0.084	0.209*	0.325**	-0.384**	-0.351**
BTN	-0.106	-0.111	0.213**	0.027	0.220**	1	-0.233**	0.059	0.001	-0.062	0.245**	0.348**	0.356**	-0.313**	-0.342**
PH	-0.146	-0.160*	-0.163*	0.151	-0.293**	0.013	1	-0.180*	-0.401**	-0.528**	0.125	-0.080	-0.044	0.260**	0.158
Dm	-0.256**	-0.276**	-0.193*	0.035	-0.211**	-0.092	0.311**	1	0.297**	0.158	0.154	0.329**	0.349**	-0.371**	-0.350**
Ash	-0.274**	-0.277**	-0.106	-0.286**	0.116	-0.087	-0.225**	0.015	1	0.611**	-0.343**	-0.040	-0.056	-0.414**	-0.272**
CP	-0.056	-0.052	-0.290**	-0.371**	-0.054	-0.181*	-0.282**	-0.063	0.580**	1	-0.144	0.000	0.019	-0.467**	-0.309**
NDF	0.022	0.026	0.071	-0.258**	0.257**	0.305**	0.102	-0.195*	-0.344**	-0.328**	1	0.740**	0.821**	-0.451**	-0.523**
ADF	-0.099	-0.097	0.051	-0.382**	0.336**	0.338**	0.079	-0.096	-0.093	-0.233**	0.832**	1	0.830**	-0.573**	-0.571**
ADL	-0.137	-0.134	0.108	-0.323**	0.358**	0.303**	0.061	-0.070	-0.139	-0.263**	0.880**	0.860**	1	-0.728**	-0.784**
ME	0.225**	0.224**	0.030	0.401**	-0.252**	-0.245**	0.103	0.126	-0.432**	-0.359**	-0.492**	-0.567**	-0.641**	1	0.978**
IVOMD	0.215**	0.215**	-0.027	0.326**	-0.260**	-0.290**	0.049	0.096	-0.303**	-0.196*	-0.580**	-0.604**	-0.729**	0.978**	1

<sup>#</sup>DF= Days to 50% flowering, DM= Days to maturity, GY=Grain yield (kg ha<sup>-1</sup>), SY=Stover yield (kg ha<sup>-1</sup>), HI=Harvest index, BTN=Basal tillers number, PH=Plant height (cm), Dm= Dry matter (%), Ash content (%), CP=Crude protein (%), NDF=Neutral detergent fiber (%), ADF=Acid detergent fiber (%), ADL=Acid detergent lignin (%), ME=Metabolizable energy (MJ/kg Dm), IVOMD=*in vitro* organic matter digestibility (%).

\*, \*\* Significant at P≤0.05, 0.01 probability levels, respectively.